

Current Claim Listing

The following presents a current claim listing for the convenience of the Examiner. No amendments to the claims are currently submitted.

1. (Previously presented) A read-only recording medium containing recorded data,

wherein the recorded data includes a first data type and a second data type, the first data type including user data, and the second data type being placed at a predetermined interval between first data types and not containing the user data, the second data type thereby being preceded and followed by the first data type,

wherein the first data type includes at least one error correcting code (ECC) data unit on which an error correction is performed, and the at least one error correcting code (ECC) data unit comprises a plurality of sub-units, and the second data type includes identification information for detecting the second data type included in the recorded data when the recorded data is reproduced, and

wherein a total size of the first data type and the second data type is equal to a size of a predetermined data unit to be used in a writable recording medium, which writable recording medium is a counterpart of the read-only recording medium, the predetermined data unit including user data and invalid data.

2. (Previously Presented) The read-only recording medium of claim 1, wherein the read-only recording medium comprises a lead-in area, a main data area and a lead-out area, wherein the first and second data types are located at the main data area of the read-only recording medium.

3. (Canceled)

4. (Previously Presented) The read-only recording medium of claim 1, wherein the second data type includes an invalid data, wherein a size of the second data type is equal to that of the invalid data of the predetermined data unit to be used in

the writable recording medium.

5-6. (Canceled)

7. (Previously Presented) The read-only recording medium of claim 1, wherein a size of the second data type is equal to that of the invalid data to be allocated intermittently in the user data of a writable recording medium.

8. (Previously Presented) The read-only recording medium of claim 1, wherein data of a predetermined pattern is formed in the second data type repeatedly.

9. (Canceled)

10. (Previously Presented) The read-only recording medium of claim 8, wherein the data of the predetermined pattern is used for servo-control.

11. (Withdrawn) A read-only recording medium, comprising at least one waste area ensuring compatibility with a writable recording medium, which is a counterpart of the read-only recording medium, wherein the at least one waste area includes invalid data that is excluded from data reproduction, and the waste area is located at a predetermined interval between first data units including real user data, the first data units including at least one error correcting code (ECC) unit having error correcting code.

12. (Withdrawn) A reproduction device for reproducing data pre-recorded on a read-only recording medium, the reproduction device comprising:

an optical pickup device for reading recorded data on the read-only recording medium;

a signal processor for reproducing the recorded data in a recognizable form; and

a controller connected to and controlling the optical pickup device and the signal processor, wherein the controller checks a presence of invalid data from one of a

plurality of waste areas which are allocated at predetermined intervals in the read-only recording medium, and controls the signal processor to sequentially output a first data unit before and after invalid data while excluding the invalid data from the output.

13. (Withdrawn) The reproduction device of claim 12, wherein the waste area is located between the first data unit including user data.

14. (Withdrawn) The reproduction device of claim 13, wherein the first data unit includes at least one ECC unit having error correcting code.

15. (Withdrawn) The reproduction device of claim 12, wherein a size of the first data unit and the waste area is equal to that of a predetermined data unit reserved in a writable recording medium.

16. (Withdrawn) The reproduction device of claim 12, wherein a plurality of pre-pits having each same length are formed in the waste area.

17. (Withdrawn) The reproduction device of claim 12, wherein a size of the waste area is equal to that of a non-user data area allocated intermittently in a user data area of a writable recording medium.

18. (Withdrawn) The reproduction device of claim 16, wherein the controller controls a servo operation using signals produced from said plurality of pre-pits.

19. (Withdrawn) A method of reproducing data stored in a read-only recording medium, comprising the steps of:

- (a) reproducing data from the read-only recording medium;
- (b) checking a presence of invalid data from the reproduced data, the invalid data from one of a plurality of waste areas which are allocated at predetermined intervals in the read-only recording medium; and

(c) outputting the reproduced data before and after the invalid data in succession while excluding the invalid data as a result of step (b), wherein said waste area is allocated between a first data type of the stored data, the first data type includes at least one ECC unit having an error correcting code.

20. (Withdrawn) The method of claim 19, wherein a size of said waste area and first data type is equal to that of a predetermined data unit to be used in a writable recording medium, which is a counterpart of the read-only recording medium, the predetermined data unit including user data and invalid data.

21. (Withdrawn) A method of reproducing data stored in a read-only recording medium, comprising the steps of:

(a) reproducing data from the read-only recording medium;

(b) checking whether or not a current reproducing position is at one of a plurality of waste areas which are allocated at predetermined intervals in the read-only recording medium; and

(c) skipping the waste area without reproducing arbitrary signals of the waste area if the current reproducing position is at the waste area, wherein said waste area is allocated respectively between a first data type of the stored data, the first data type includes at least one ECC unit having an error correcting code.

22. (Withdrawn) A method of reproducing data in a read-only recording medium, comprising the steps of:

reading a first data type having at least one ECC unit, which includes an error correcting code; and

storing the first data type sequentially in a memory while preventing a storing of a second data type containing an invalid data, the second data type preceded or followed by the first data type, wherein a size of the first data type and the second data type is equal to that of a predetermined data unit to be used in a writable recording medium, which is a counterpart of the read-only recording medium, the predetermined unit

including user data and invalid data.

23. (Previously Presented) The read-only recording medium of claim 1, wherein the second data type has a length of 2K bytes or less.

24. (Previously Presented) The read-only recording medium of claim 1, wherein the second data type has a same size as one sub-unit.

25. (Previously Presented) The read-only recording medium of claim 24, wherein the sub-unit is a sector.